

CONCLUSION: Existing epidemiological data can provide tailored estimates of concrete benefits resulting from improving the quality of anticoagulation.

CV2

A SIX YEAR FOLLOW-UP STUDY OF THE RELATIONSHIP BETWEEN MORTALITY, HOSPITALISATION AND ADHERENCE TO STATIN TREATMENT AFTER FIRST MYOCARDIAL INFARCTION

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OBJECTIVE: To measure adherence to statins by patients treated for secondary prevention after myocardial infarction and to estimate the effect of adherence on outcome.

METHODS: We used a cohort design in the population of Tayside, Scotland. Patients who experienced their first MI between January 1990 and November 1995 were identified from hospital discharge data. We used two outcomes: mortality from any cause; hospitalization for recurrent MI. Adherence to statins was calculated as the number of days for which statins were supplied divided by the total number of days in the study for each patient. Results were adjusted for age, sex, deprivation (as measured by the Carstairs code), serum cholesterol level, diabetes mellitus, cardiovascular drugs and other hospitalization using a Cox regression model.

RESULTS: Of 5590 patients enrolled in the cohort 1299 (23.2%) died during the follow-up period and 717 (12.8%) experienced at least one further MI. Only 7.7% of patients used statins, and in comparison with non-users, these patients had more cardiovascular risk factors. Compared to those not using statins, the adjusted relative risk of mortality (95% CI) by quintiles of adherence was 0.65 (0.24–1.80) for the worst adherence quintile, 0.46 (0.06–3.43) for the second, 1.03 (0.37–2.88) for the third, 0.19 (0.03–1.37) for the fourth, and 0.20 (0.09–0.47) for the best adherence quintile. The adjusted relative risks of readmission by quintiles of adherence were 0.65 (0.24–1.79) for the worst adherence quintile, 0.47 (0.06–3.51) for the second, 1.05 (0.37–2.94) for the third, 0.20 (0.03–1.41) for the fourth, and 0.21 (0.09–0.48) for the best adherence quintile.

CONCLUSIONS: Statins were used infrequently and use was a marker of cardiovascular risk. Despite such confounding by indication, good adherence to treatment was associated with lower risks of further MI and lower mortality.

CV3

VASOPEPTIDASE INHIBITOR REDUCES IN-HOSPITAL COSTS FOR CONGESTIVE HEART FAILURE PATIENTS: RESULTS FROM THE IMPRESS TRIAL

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OBJECTIVE: The IMPRESS clinical trial randomized patients with congestive heart failure to a daily regimen of either omapatrilat or lisinopril. At 24 weeks, patients randomized to omapatrilat had a significant reduction in the primary endpoint of death, hospitalization, or discontinuation of study drug for worsening heart failure ($p = .035$) and fewer cardiac events ($p = .04$). This study sought to determine the economic consequences of the omapatrilat patient's lower event rates.

METHODS: Economic outcomes were assessed in terms of hospitalization events and their medical costs. Hospital event information was obtained via serious adverse event forms, and hospital costs were evaluated by assigning each hospitalization a DRG-based average cost for physician and hospital services. Emergency room visits for worsening heart failure were assigned costs equivalent to those at Duke University Medical Center. All costs were expressed in 1998 US dollars. Drug costs were not assessed.

RESULTS: Patients in the omapatrilat ($n = 289$) and lisinopril ($n = 284$) arms were evenly matched with regard to baseline characteristics: age (both 64 years); NYHA class III or IV heart failure (36% versus 38%); ejection fraction (both 28%). There was no difference between study arms in all-cause mortality. However, there was a trend toward a greater number of all-cause hospitalizations in the lisinopril versus omapatrilat patients (0.275 versus 0.215, $p = .07$). Differences in cardiac hospitalizations between lisinopril and omapatrilat were significant (0.208 versus 0.145, $p = .03$). There was a trend toward reduced medical costs at 24 weeks follow-up in omapatrilat-treated patients (US\$1930 versus US\$2002, $p = .09$). Considering only cardiac medical costs, this trend toward reduced medical costs became significant (US\$1240 versus US\$1442, $p = .03$).

CONCLUSIONS: In the first study to compare economic outcomes in congestive heart failure patients treated with omapatrilat and lisinopril, we found fewer hospitalizations and lower medical costs for omapatrilat patients at 24 weeks.

COST ESTIMATION**CE1**

IMPACT OF CENSORED COST DATA ON THE OUTCOMES OF ECONOMIC EVALUATIONS

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OBJECTIVE: Patients in a clinical trial who withdraw before the scheduled end date are a serious problem in economic evaluations. The method to deal with data from these patients can have important impact on out-